CMS Simulation (LHE) 13 TeV 0.04 Fraction of events / 0.1 $pp \rightarrow h \rightarrow 2n_{1} \rightarrow 2n_{D} + 2~\gamma_{D} \rightarrow 2n_{D} + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_1} = 10 \text{ GeV}, m_{n_2} = 1 \text{ GeV}$ 0.035 $m_{\gamma_0} = 0.3 \text{ GeV}, c\tau_{\gamma_0} = 0.05 \text{ mm}$ 1st dark photon (leading p_T) 0.03 2nd dark photon 0.025 0.02 0.015 0.01 0.005 -3 3 -5